

Memorandum

*Flex your power!
Be energy efficient!*

To: RAMSES SARGISS
Office Chief
Maintenance & Toll Bridge Engineering

Date: September 16, 2011
File: 04-MRN-1-PM 50.3/50.6,
04-SON-1-PM 0/0.6
Program: 201.110
Project ID 0412000116 K
(EA 04-20950K)
Estero Americano
Bridge Replacement

Attn: FUK NYAN KURNIAWAN
115, HM3, & SHOPP 119 Bridge Program Advisor

From: BETCY JOSEPH *B*
Project Management North

Subject: Project Initiation Document (PID) Refresher

Background

The Project Scope Summary Report (PSSR) was approved on May 17, 2006. The original project cost was \$2.4 Million. The escalated cost to mid-construction year, January 2008 was \$5.5 Million. The project was "refreshed" as part of the plan to program in 2008 State Highway Operation and Protection Plan (SHOPP), but was not programmed. The 2007 refresher construction cost was \$6.57 Million escalated to the mid-construction year – June 2011. This project is now "refreshed" again for cost for programming in the 2012 SHOPP.

Project Scope

This project proposes to replace the existing bridge (Bridge # 27-28) on Route 1 in Marin County.

Preliminary Project Cost Estimate

- Current project construction cost estimate is \$4,348,000
- Right of Way cost \$ 1,530,000
- RTL will be in June 2016
- Mid-year construction cost (October 2017) is \$ 5,722,00
- District 04 recommended escalation rate of 4% was used for all escalation computations, with 25% contingency.

Attachments:

- (1) Updated Project Schedule
- (2) Updated Preliminary Project Cost Estimate
- (3) Updated Support Cost Estimate
- (4) Updated Right of Way Data Sheet
- (5) Updated Advance Planning Estimate
- (6) Updated Storm Water Data Report

ATTACHMENTS

Project Schedule

Estero Americano Bridge
EA 20950K
In Marin/Sonoma Counties

PROJECT SCHEDULE

Start PAED	7/2012
PAED	7/2014
Request ROW	11/2014
PSE Submittal	3/2016
ROW Certification	5/2016
RTL	6/2016
Start Construction	10/2016
End Construction	10/2018

Preliminary Project Cost Estimate

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

District-County-Route 04-MRN/SON-1
PM 50.3/50.5
0.00/0.06
EA 20950K
Program Code 201.11

PROJECT DESCRIPTION:

Limits In Marin and Sonoma Counties on Route 1

Proposed Improvement Replace Estero Americano Bridge

Alternative Build

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	<u>2,980,000</u>
TOTAL STRUCTURE ITEMS	<u>1,368,000</u>
SUBTOTAL CONSTRUCTION COSTS	<u>4,348,000</u>
TOTAL RIGHT OF WAY ITEMS	<u>1,530,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	<u>5,878,000</u>

Reviewed by District Program Manager _____

Approved by Project Manager _____ Date _____

Phone No. _____

Program Code 201.11

Section 1 Earthwork

Subtotal Earthwork	166,475.00
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Section 2 Pavement Structural Section

Subtotal Pavement Structural Section	177,157
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Section 3 Drainage

Subtotal Drainage	6,600
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District-County-Route 04-MRN/SON-1
 PM 50.3/50.5
 PM 0.00/0.06
 PM 20950K
 EA 201.11

Section 4: Specialty Items

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls			\$	\$	
Noise Barriers			\$	\$	
Metal Beam Guardrailing	280	LF	\$ 41	\$ 11,480	
Equipment/Animal Passes			\$	\$	
Water Pollution Control	LS	LS	\$ LS	\$ 983,500	See Below
Hazardous Waste					
Investigation and/or			\$	\$	
Temporary K-Rail	1155	LF	\$ 38	\$ 43,890	
Temporary Crash Cushion	4	EA	\$ 447	\$ 1,788	
Environmental Compliance			\$	\$ -	See Below
Resident Engineer Office			\$	\$	
Adjust Utility Cover to Grade					
(Manhole, Pullbox)			\$	\$	
Minor Concrete (Curb,					
Sidewalk, and Curb Ramp)			\$	\$	
Subtotal Specialty Items					1,040,658

Section 5: Traffic Items

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Lighting			\$	\$	
Traffic Delineation Items			\$	\$	
Traffic Signals	1	LS	\$	\$	
Terminal System (Type SRT)	4	EA	\$ 3500	\$ 14,000	
Roadside Signs			\$	\$ -	
Traffic Control Systems	1	LS	\$ 314700	\$ 314,700	See Below
Transportation Management Plan	1	LS	\$ 255800	\$ 255,800	
Detectable Warning Surface			\$	\$ -	
Thermoplastic Traffic Stripe			\$	\$ -	
Thermoplastic Pavement					
Marking			\$	\$	
Remove Channelizer			\$	\$ -	
Remove Traffic Stripe			\$	\$ -	
Remove Pavement Marking			\$	\$	
Subtotal Traffic Items					584,500

District-County-Route 04-MRN/SON-1
 PM 50.3/50.5
 PM 0.00/0.06
 EA 20950K
 Program Code 201.11

Section 6 Planting and Irrigation

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Highway Planting			\$	\$	
Replacement Planting			\$	\$	
Irrigation Modification			\$	\$	
Relocate Existing Irrigation					
Facilities			\$	\$	
Irrigation Crossovers			\$	\$	
Subtotal Planting and Irrigation Section					<u>0</u>

Section 7: Roadside Management and Safety Section

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Vegetation Control			\$	\$	
Gore Area Pavement			\$	\$	
Pavement beyond the gore			\$	\$	
Miscellaneous Paving			\$	\$	
Erosion Control			\$	\$	
Slope Protection			\$	\$	
Side Slopes/Embankment			\$	\$	
Maintenance Vehicle Pull			\$	\$	
Minor Items	LS	LS	\$ 30,300	\$ 30,300	
Roadside Facilities (Vista			\$	\$	
Points, Transit, Park and			\$	\$	
Relocating roadside					
facilities/features					
(Signs/Bollards)	1		\$	\$	
Subtotal Roadside Management and Safety Section					<u>30,300</u>

TOTAL SECTIONS: 1 thru 7 2,005,690.08

Program Code 201.11

Section 8: Minor Items

	\$ 2,005,690	10	\$ 200,569
(Subtotal Sections 1 thru 7)			

TOTAL MINOR ITEMS	200,569
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Section 9: Roadway Mobilization

\$ 2,206,259	10	\$ 220,626
(Subtotal Sections 1 thru 8)		

TOTAL ROADWAY MOBILIZATION	220,626
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Section 10 Roadway Additions

Supplemental Work

	\$ 2,206,259	0	\$ -
(Subtotal Sections 1 thru 8)			

Contingencies

\$ 2,206,259	25	\$ 551,565
(Subtotal Sections 1 thru 8)		

TOTAL ROADWAY ADDITIONS	551,565
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TOTAL ROADWAY ITEMS	2,978,450
(Subtotal Sections 1 thru 10)	

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Water Pollution Control	<u>1</u>	<u>LS</u>	\$ <u> </u>	\$ <u>0</u>
Environmental				
Compliance/Mitigation	<u>1</u>	<u>LS</u>	\$ <u> </u>	\$ <u>0</u>
Traffic Control System	<u>1</u>	<u>LS</u>	\$ <u> </u>	\$ <u>0</u>

FINAL TOTAL ROADWAY ITEMS	2,978,450
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USE	2,980,000
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Estimate Prepared By Muktar Ketebe Phone # _____ Date 9/15/2011
(Print Name)

Estimate Checked By Warwick W.T. Cheung Phone # Date
(Print Name)

District-County-Route 04-MRN/SON-1
PM 50.3/50.5
PM 0.00/0.06
EA 20950K
Program Code 201.11

III. RIGHT OF WAY ITEMS

ESCALATED

A. Acquisition, including excess lands, damages to remainder(s) and Goo	\$	<u>10,000.00</u>
Project Permit Fees	\$	<u>-</u>
Environmental Estimate		<u>1,500,000</u>
Grantor's Appraisal Cost	\$	<u>10,000</u>
B. Utility Relocation (State share)	\$	<u>5,000</u>
C. Relocation Assistance	\$	<u>-</u>
D. Clearance/Demolition	\$	<u>-</u>
E. Title and Escrow Fees	\$	<u>5,000</u>

TOTAL RIGHT OF WAY ITEMS 1,530,000.00
(Escalated Value)

Anticipated Date of Right of Way Certification _____
(Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work: _____

Right of Way Branch Cost Estimate for Work * _____

* This dollar amount is to be included in the Roadway and/or Structures Items of

COMMENTS: _____

Estimate Prepared By _____ Phone # _____ Date _____
(Print Name)

NOTE: If appropriate, attach additional pages and backup.

Support Cost Estimate

	PROJECT SUPPORT COMPONENTS								
	PA&ED 0 Phase		Design 1 Phase		Right of Way 2 Phase		Construction 3 Phase		Total
	Dist	DES	Dist	DES	Dist	DES	Dist	DES	
Estimated PY's	5.0	1.0	3.0	0.5	1.5	0.0	4.0	0.5	15.5
Estimated PS \$'s (\$1000's)	900	180	540	90	270	0	720	90	2790.0
Estimated PYE \$'s (\$1000's)									
Total \$'s (\$1000's)	900	180	540.0	90.0	270.0	0.0	720.0	90.0	2790.0

Right of Way Data Sheet

T0: Office of Advance Planning-PSR I

Date 9/9/2011
Dist 4 Co Mrn Rte 1 PM 50.3/50.5
Co Son Rte 1 PM 0.0/0.06

Attention: WARWICK W. T. CHEUNG
District Branch Chief

EA 20950K (No EFIS ID yet)

From: ENID LAU
Right of Way Resource Manager

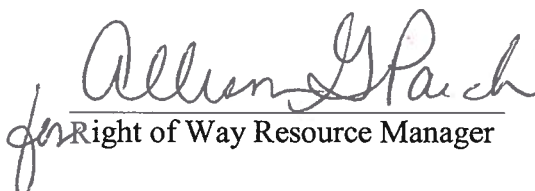
Bridge Replacement
D.S. #5979

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on August 19, 2011 and the following assumptions and limiting conditions.

- ☐ 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.
- ☐ 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.
- ☐ 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- ☐ 4. This estimate does not include \$_____ right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.
- ☐ 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 18 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 15 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.


for Right of Way Resource Manager

Attachments:

- ☒ Right of Way Data Sheet – Page One (always required)
- ☒ Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
- ☒ Utility Information Sheet
- ☐ Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: Office of Advance Planning
 PSR I

Date 9/8/2011 D.S. # 5979

Dist. 04 Co. Mrn/Son Rte 1 PM Var

EA 04-20950K (04)

ATTN: WARWICK W. T. CHEUNG

Project Description: Bridge Replacement

SUBJECT: Right of Way Data - Alternate No.

1. Right of Way Cost Estimate:

	Current Value (Future Use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages, and Goodwill	<u>\$10,000.00</u>	<u>%</u>	<u>\$10,000.00</u>
Environmental Estimate			<u>\$1,500,000.00</u>
Grantor's Appraisal Cost			<u>\$10,000.00</u>
B. Utility Relocation (State Share)	<u>\$5,000.00</u>	<u>%</u>	<u>\$5,000.00</u>
C. Railroad (from page 6)			<u>\$0.00</u>
D. Relocation Assistance	<u>\$0.00</u>	<u>%</u>	<u>\$0.00</u>
E. Clearance Demolition	<u>\$0.00</u>	<u>%</u>	<u>\$0.00</u>
F. Title and Escrow Fees	<u>\$5,000.00</u>	<u>%</u>	<u>\$5,000.00</u>
G. <u>TOTAL ESCALATED VALUE</u>			<u>\$1,530,000.00</u>
H. Construction Contract Work	<u>\$0.00</u>		

2. Anticipated Date of Right of Way Certification

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvements	
X <u> </u>		U4-1 <u>2</u>	None	<u>X</u>
A <u>2</u>		-2 <u> </u>	C&M Agrmt	<u> </u>
B <u> </u>		-3 <u> </u>	Svc Cont.	<u> </u>
C <u> </u>		-4 <u> </u>	Design	<u> </u>
D <u> </u>		U5-7 <u>2</u>	Const.	<u> </u>
E <u>XXXX</u>		-8 <u> </u>	Lic/RE/Clauses	<u> </u>
F <u>XXXX</u>		-9 <u>2</u>		
Misc R/W Work				
RAP Displ				<u>0</u>
Clear Demo				<u>0</u>
Const. Permits				<u>0</u>
Condemnation				<u>0</u>
Total <u>2</u>				

Areas: Right of Way

No. Excess Parcels Excess

Enter PMCS Screens 9/11/11

By Alaich

Enter AGRE Screen (Railroad Data Only)

By

4. Are there any major items of construction contract work?
Yes ☐ No ☒ (If yes, explain)
5. Provide a general description of the right of way and excess lands required(zoning, use, major improvements critical or sensitive parcels, etc.).
No right of way required. ☐
Two utility easements will be required for this project. The requirements are from agricultural parcels. No improvements are affected.
6. Is there an effect on assessed valuation? (If yes explain)
Yes ☐ Not Significant ☐ No ☒
7. Are utility facilities or rights of way affected? Yes ☒ No ☐
If yes, attach Utility Information Sheet Exhibit 01-01-05)
8. Are railroad facilities or rights of way affected? Yes ☐ No ☒
If yes, attach Railroad Information Sheet Exhibit 01-01-06)
9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒
(If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)
10. Are RAP displacements required? Yes ☐ No ☒
(If yes, provide the following information)
- No. of single family _____ No. of business/non profit _____
No. of multi-family _____ No. of farms _____
- Based on Draft / Final Relocation Impact Statement / Study dated _____, it is anticipated that sufficient replacement housing will / will not be available without Last Resort Housing.
11. Are material borrow and / or disposal sites required? Yes ☐ No ☒
(If yes, explain)
12. Are there potential relinquishments / abandonments? Yes ☐ No ☒
(If yes, explain)
13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Are there Environmental Mitigation costs? Yes ☒ No ☐
(If yes, explain)
Pat Pang has requested that \$1,500,000 be included for Environmental Mitigation and Permits.
15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less than PMCS lead time and / or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 18 months.

16. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on maps provided by Warwick W.T. Cheung on August 18, 2011.

Evaluation Prepared By: Renata Frey

Right of Way: Name Renata Frey Date 9/8/11

Railroad: Name Pat G. G. G. Date 9-8-11

Utilities: Name Lo Marvada Date 9/8/11

Recommended for Approval:

Allen G. G. G.
for Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set fourth, and find this Data Sheet complete and current.

[Signature]
for Chief, R/W Appraisal Services
9/9/11
Date

cc: Program Manager
Project Manger

UTILITY INFORMATION SHEET

1. Utility owners located within project limits:
AT&T, PG&E
2. Facilities potentially impacted by project (if known, include Owners(s) & facility type(s)):
AT&T, PG&E
3. Anticipated Workload:

<u> X </u>	Utility Verification required
<u> X </u>	Positive Identification
<u> X </u>	Utility Relocation
<u> </u>	Other (Specify)
4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

 Involves possible relocation of electric transmission facilities
(If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	<u> 2 </u>	Owner Expense Involvements
U4-2	<u> </u>	State Expense Involvements (Conventional, No Fed Aid)
U4-3	<u> </u>	State Expense Involvements (Freeway, No Fed Aid)
U4-4	<u> </u>	State Expense Involvements (Conventional or Freeway, Fed Aid)
U5-7	<u> 2 </u>	Verifications - without involvements
U5-8	<u> </u>	Verifications - 50% involvements
U5-9	<u> 2 </u>	Verifications resulting in involvements

NOTE: The sum of U-4's must equal the sum of 1/2 of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS \$ 5,000

Prepared by: Leo Munneke


Right of Way Utility Coordinator

 9/8/11
Date

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

EA 20950K

(all measures are in HOURS)

WBS Activity Code

ADJUSTMENT FACTOR =

0.00%

100

Perform Project Management

100.25

Project Management - Right of Way Component

.25.05

Initiation and Planning

.25.10

Execution and Control

.25.15

Close Out

100 Sub-Total

150

Develop Project Initiation Document (PID)

150.05

Define Transportation Problem & Assess Site

.05.15

Perform Utility Search

150.10

Develop Initial Alternatives

.10.10

Perform Value Analysis

150.15

Analyze Alternatives

.15.05

Prepare RW Data Sheets

.15.10

Assess Utility Relocation Requirements

.15.15

Determine Railroad Involvement

150.25

Prepare and Approve PID (PSR, PSSR, etc.)

.25.20

Circulate, Review & Approve PID

150 Sub-Total

Moderate
Low

75
150
50

275

16

0

24
24
8

24

96

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

EA 20950K

(all measures are in HOURS)

WBS Activity Code

Moderate
Low

160		Perform Preliminary Engineering Studies & Prepare Draft Project Report.
160.05		Review and Update Project Information
.05.35	24	Review Project Cost Estimate

160.10		Perform Engineering Studies
.10.20	0	Perform Value Analysis
.10.40	24	Review & Update Right of Way Data Sheet
.10.45	16	Re-assess Utility Impacts
.10.50	0	Perform Railroad Study

160.15		Prepare Draft Project Report
.15.15	0	Obtain Approval for Exceptions to Encroachment Policy
.15.25	16	Circulate, Review & Approve Draft Project Report

160 Sub-Total

80

165		Perform Environmental Studies & Prepare Draft Environmental Document (DED)
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165.10		Perform General Environmental Studies
.10.10	24	Obtain Rights of Entry for Environmental Studies
.10.55	0	Prepare Draft Right of Way Relocation Impact Document

165 Sub-Total

24

175		Circulate Draft Environmental Document & Select Preferred Project Alternative
175.10		Prepare for and Hold Public Hearing
.10.25	0	Review Map Displays & Discuss Public Hearing

R/W General Project Matrix

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORK\PLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

EA 20950K

(all measures are in HOURS)

WBS Activity Code

.10.35 Hold Public Hearing

Moderate
Low
0

175.15
.15 Respond to Public Comments and Correspondence

0

175 Sub-Total

0

180

Prepare & Approve Project Report & Final Environmental Document

180.10

Prepare & Approve Final Environmental Document (FED)

.10.15 Prepare Final Right of Way Relocation Impact Document

0

180 Sub-Total

0

*DO NOT TYPE DIRECTLY INTO HOUR FIELDS FOR ACT. 195 AS THEY ARE FORMULA DRIVEN BY TABS BELOW!

195

Right of Way Property Management and Excess Land

Property Management

195.40

.40.05 Fair Market Rent Determination (Residential)

.40.10 Fair Market Rent Determination (Non-Residential)

.40.15 Regular Property Management

.40.20 Property Maintenance and Rehabilitation (Rentable Property)

.40.25 Property Maintenance and Rehabilitation (Non-Rentable Property)

.40.30 Hazardous Waste and Hazardous Materials

.40.35 Transfer of Property to Clearance Status

0
0
0
0
0
0
0

Excess Land

195.45

.45.05 Excess Land Inventory

0

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

EA 20950K

(all measures are in HOURS)

WBS Activity Code

.45.10	Excess Land Appraisal and Public Sale Estimate
.45.15	Administering Government Code Section 54235
.45.20	Property Disposal of Unit up to \$15,000 in Value
.45.25	Property Disposal of Unit between \$15,001 and \$500,000 in Value
.45.30	Property Disposal of Unit over \$500,000 in Value
.45.35	CTC and AAC Coordination

Moderate
Low
0
0
0
0
0
0
0
0

195 Sub-Total

0

200

Coordinate Utilities

Perform Preliminary Utility Verification

.05 Perform Preliminary Utility Verification

64

Determine Utility Locations(Potholing) & Prepare Conflict Maps

.10.05 Prepare Notices & Obtain Agreements for Potholing

.10.10 Perform Potholing

.10.15 Perform Utility Surveys

.10.20 Review for Conflicts after Utility Surveys

.10.25 Prepare Utility Conflict Maps

.10.30 Pothole Revised Notice, Amended UA & Process Billing per UA

64
40
16
24
24
24

200.15 Utility Conflict Resolution

.15 Utility Conflict Resolution

32

200.20 Implement Utility Relocation Plan

.20.05 Prepare, Approve and Transmit Liability/FHWA Authorization Package

.20.25 Relocation Revised Notice, Amended UA & Process Billing per UA

.20.30 Prepare Utility JUA/CCUA/Conveyance Document Package

40
24
40

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

(all measures are in HOURS)

WBS Activity Code

200.25	Manage the Utility Relocation
.25	Manage the Utility Relocation

200 Sub-Total

Moderate. Low
16
408

205	Obtain Permits, Agreements & Route Adoptions
205.10	Obtain Permits
.10.95	Obtain "Other" Permits

16

205.15	Obtain Railroad Agreements
.15.15	Prepare Service Contract for Railroads
.15.20	Prepare PUC Exhibits & Application

0
0

205.35	Prepare & Execute Cooperative Agreement
.35.05	Prepare & Execute Cooperative Agreement for Environmental Process
.35.10	Prepare & Execute Cooperative Agreement for Design
.35.20	Prepare & Execute Cooperative Agreement for Right of Way

0
0
0

205.50	Prepare & Execute Cooperative Agreement for Relinquishment
.50	Prepare & Execute Cooperative Agreement for Relinquishment

0

205 Sub-Total

16

*DO NOT TYPE DIRECTLY INTO HOUR FIELDS FOR ACT. 225 AS THEY ARE FORMULA DRIVEN BY TABS BELOW!

225	Obtain Right of Way Interest for Project Right of Way Certification
225.50	Parcel and Project Documentation
	Parcel and Project Documentation

16

R/W General Project

Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

(all measures are in HOURS)

WBS Activity Code

225.55	Obtain Right of Way Interest
.55.05	Right of Way Appraisals
.55.10	Right of Way Acquisitions
.55.15	Right of Way Relocation Assistance
.55.20	Right of Way Clearance
.55.25	Right of Way Condemnation

225 Sub-Total

441

230	Prepare Draft PS&E
230.25	Prepare Draft Utility Plans
.25.10	Prepare Utility Relocation Plans

16

230.35	Prepare Draft Specifications
.35.25	Develop Utility Specifications

8

230 Sub-Total

24

235	Mitigate Environmental Impacts & Clean-up Hazardous Waste
235.05	Perform Environmental Mitigation
.05.20	Perform Environmental Mitigation R/W Work

24

235.10	Perform Detailed Site Investigation for Hazardous Waste
.10.05	Obtain Right or Permit for Hazardous Waste Site Investigations

24

235 Sub-Total

48

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

(all measures are in HOURS)

WBS Activity Code

EA 20950K

Moderate
Low

*DO NOT TYPE DIRECTLY INTO HOUR FIELDS FOR ACT. 245 AS THEY ARE FORMULA DRIVEN BY TABS BELOW!

245		Post Right of Way Certification Work
	245.50	Parcel and Project Documentation
	.50	Parcel and Project Documentation

245.55		Close Out Right of Way Interests
.55.05		Right of Way Appraisals
.55.10		Right of Way Acquisitions
.55.15		Right of Way Relocation Assistance
.55.20		Right of Way Clearance
.55.25		Right of Way Condemnation

30
50
0
0
25

245 Sub-Total

105

255		Circulate, Review & Prepare Final District PS&E Package
	255.05	Circulate & Review Draft District PS&E Package
	.05	Circulate & Review Draft District PS&E Package

16

255.10		Update PS&E Package
	.10.30	Update Utility PS&E

16

255 Sub-Total

32

270		Perform Construction Engineering & General Contract Administration
	270.20	Perform Construction Engineering Work
	.20.01.50	Provide Technical Support

8

R/W General Project Matrix

Project Management Costs (Not Associated With An Individual Parcel) - FILE NAME: R\WORKPLANSAM

DATE PREPARED:

9/12/2011

DATE UPDATED:

12-Sep-11

PROJECT E.A.

(all measures are in HOURS)

WBS Activity Code

270.25	.25.02.05
--------	-----------

Perform Construction Contract Administration Work

Secure Lease for Resident Engineer Office Space or Trailer

Moderate
Low

8

270 Sub-Total	16
---------------	----

16

285	285.10
-----	--------

Prepare & Administer Contract Change Orders

Provide Functional Support

Provide "Other" Functional Support

.10.01.95

8

285 Sub-Total	8
---------------	---

8

TOTALS	1,573
--------	-------

SEE COMMENTS BELOW

These numbers are for RIGHT OF WAY EFFORTS ONLY, not the efforts of other RBS groups.

The hours for Right of Way Engineering and Surveys and Mapping are provided directly from that unit to the Project Manager.

THIS TEMPLATE WAS LAST "UPDATED" ON : March 18, 2004

Advance Planning Study

Memorandum

To: **WARWICK W. T. CHEUNG**
Branch Chief
District 4/ Office of Advance Planning-PSR I

Date: September 1, 2011

File No.: 04-MRN-1-50.3/50.5
Bridge Replacement
EA: 04-20950K

From: **DEPARTMENT OF TRANSPORTATION**
ENGINEERING SERVICES, MS 9
Office of Structure Design (West)

Subject: Advance Planning Study

Enclosed, please find two copies of the Advance Planning Studies for the above referenced project, as submitted to Engineering Services by Request Memo dated August 16, 2011.

This study was prepared based on the following assumptions:

1. Due to time constraints, this study was prepared by modifying the previous Advanced Planning Study that was sent to District 4 on November 19, 2004.
2. Structures Hydraulics determined during their evaluation for the 2004 study that the bridge is expected to overtop during specific flood events.
3. A preliminary foundation report was not available as of the date of this study, but the proposed Class 70 piles were assumed for estimation purposes.
4. One lane traffic control will be allowed on the bridge during the construction duration.
5. The estimated construction cost is as follows:

BR. No.	BR. NAME	Cost (x\$1000)
27-0028	Estero Americano Bridge	1,368

Should there be any questions, please call Muthanna Omran, at 510-286 5798, or myself at 510-286 5790.

For : **SAMAD HAMOUD**
Senior Bridge Engineer

Muthanna Omran

Muth 5.9.11

Enclosure

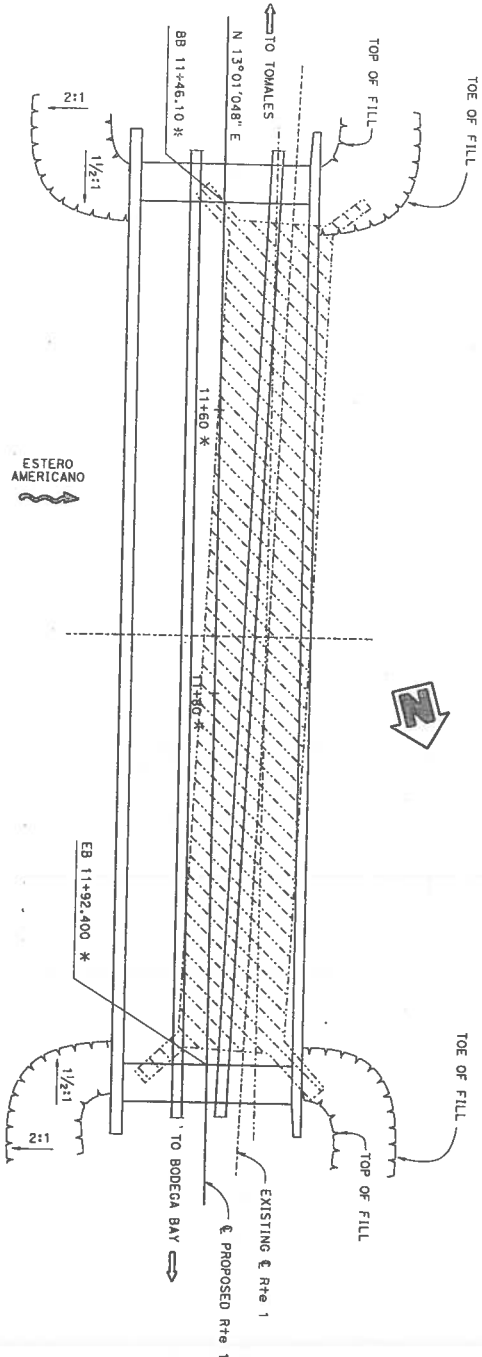
c: Branch Chief
TLE
PCE
Applicable ESC Functional Units
file

STRUCTURE DESIGN ADVANCED PLANNING STUDY SHEET (FORM 100) (REV. 02-03-10)

- ASSUMPTIONS**
1. Due to time constraints, this study was prepared by modifying the previous Advanced Planning Study that was sent to District 4 November 19, 2004.
 2. Structures Hydraulics determined during their evaluation for the 2004 study that the bridge is expected to overtop during specific flood events.
 3. A preliminary foundation report was not available as of the date of this study, but the proposed Class 70 piles were assumed for estimation purposes.
 4. One lane traffic control will be allowed on the bridge during the construction duration.

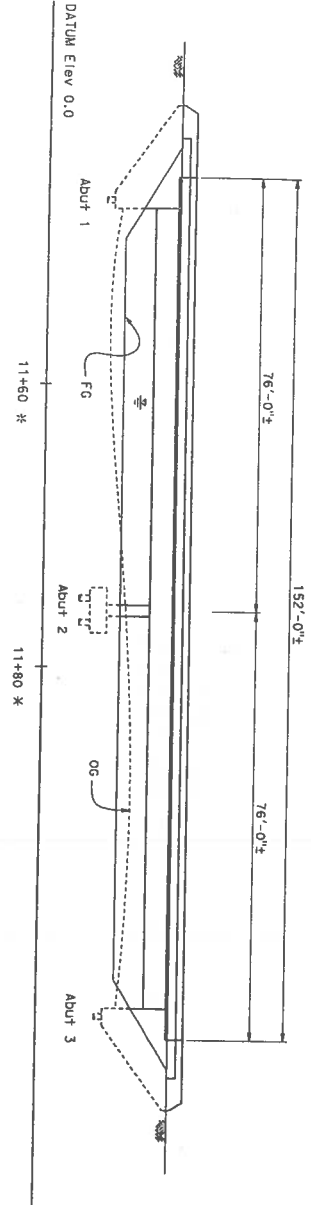
PLAN

$\frac{1}{2}" = 1'-0"$



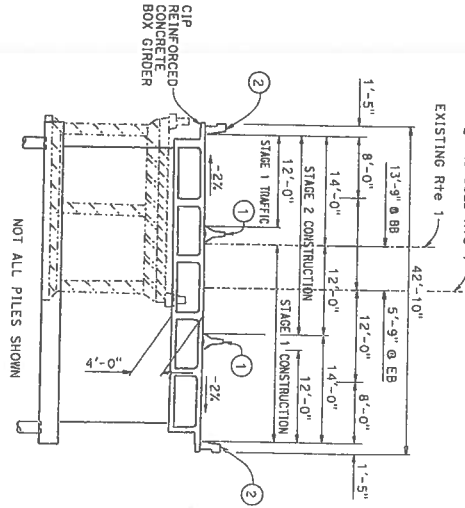
ELEVATION

$\frac{1}{8}" = 1'-0"$



TYPICAL SECTION

$\frac{1}{8}" = 1'-0"$



DIST.	COUNTY	ROUTE	POST MILE
04	M-F-N	1	X

DESIGNED BY	DATE	STRUCTURE DESIGN	PLANNING STUDY
R. Gutierrez	9/16/2004	BRIDGE	ESTERO AMERICANO (REPLACE)
DRWN BY	DATE	BRIDGE NO. 27-0026	UNIT: 3617
Liang Mo	8/23/2011	SCALE: AS NOTED	FEA: 04-20950K
CHECKED BY	DATE		
M. Compton	8/23/2011		
APPROVED	DATE		
S. Hornold	9/02/2011		

FILE NO. 27-0026, 0028, 0029, 0030

* - AVAILABLE ALIGNMENT IS METRIC

- ① TEMPORARY RAILING TYPE "K"
- ② BARRIER TYPE 732

DATE OF ESTIMATE	08-30-2011
BRIDGE REMOVAL	= 288,000.00
STRUCTURE DEPTH	= 4'-0"
LENGTH	= 152'-0"
WIDTH	= 42'-10"
AREA	= 6510.7 SQFT
COST / C.F. INCLUDING 10% MOBILIZATION & 40% CONTINGENCY	= 2451,295.00
TOTAL COST	= 31,360,000.00

RCVD BY: JTY

IN EST: 10/7/2004
OUT EST: 10/29/2004

BRIDGE: ESTERO AMERICANO BRIDGE

BR. No.:

TYPE: RC BOX GIRDER

CU: 04-279

EA: 20950K

LENGTH: 46.30 WIDTH: 13.07

DISTRICT: 04

RTE: 1

CO: MRN

KP: 81.3/81.4

AREA (SQ. M)= 605

DESIGN SECTION: 16

OF STRUCTURES IN PROJECT : 01

EST. NO.

PRICES BY :

BWL

COST INDEX:

QUANTITIES BY:

R.M. Quitoriano

DATE: 9/29/2004

QUANTITIES CHECKED BY:

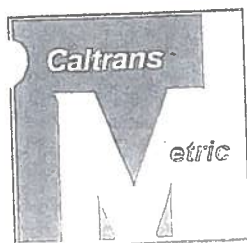
M, Omran

DATE: 9/30/2004

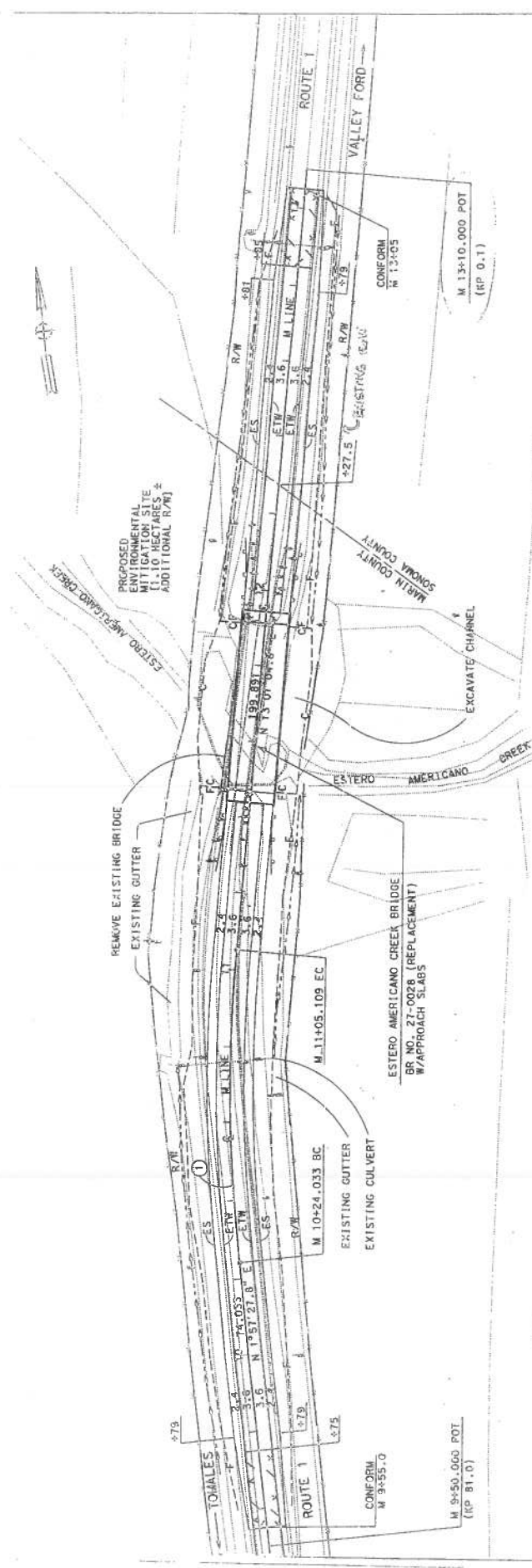
	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	TEMPORARY RAILING	K	M	96	\$100.00	\$9,600.00
2	STRUCTURE EXCAVATION, BRIDGE		M3	201	\$140.00	\$28,140.00
3	STRUCTURE BACKFILL, BRIDGE		M3	91	\$160.00	\$14,560.00
4	PERVIOUS BACKFILL MATERIAL		M3	20	\$160.00	\$3,200.00
5	FURNISH PILING (CLASS 400)		M	336	\$80.00	\$26,880.00
6	DRIVE PILE (CLASS 400)		EA	28	\$1,600.00	\$44,800.00
7	STRUCTURAL CONCRETE, BRIDGE		M3	384	\$1,200.00	\$460,800.00
8	STRUCTURAL CONCRETE, BRIDGE FOOTING		M3	32	\$900.00	\$28,800.00
9	STRUCTURAL CONCRETE, APPROACH SLAB	EQ(3)	M3	17	\$850.00	\$14,450.00
10	BAR REINFORCING STEEL (BRIDGE)		KG	33,000	\$3.00	\$99,000.00
11	JOINT SEAL (MR 50MM MAX)	A	M	26	\$250.00	\$6,500.00
12	CONCRETE BARRIER	25	M	112	\$220.00	\$24,640.00
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
	SUBTOTAL					\$761,370
	MOBILIZATION (@ 10 %)					\$84,597
	SUBTOTAL BRIDGE ITEMS					\$845,967
	CONTINGENCIES (@ 25%)					\$211,492
	BRIDGE TOTAL COST					\$1,057,458
	COST PER SQ. METER					\$1,747.46
	BRIDGE REMOVAL (CONTINGENCIES INCL.)					\$90,000
	WORK BY RAILROAD OR UTILITY FORCES					
	GRAND TOTAL					\$1,147,458
	FOR BUDGET PURPOSES - SAY					\$1,147,000

ROUTING

1. DES SECTION
2. DES A SUPV
3. DES B SUPV
4. DES C SUPV
5. DES D SUPV



COMMENTS:



LAYOUT
 REPLACE ESTERO AMERICANO
 BRIDGE NO. 27-0028
 04- WRH/20H-1
 KP 01.0/81.3, 0.0 D.I.
 EA 20950K
 SCALE 1:1000
 ATTACHED SHEET 1 OF 1

---F--- LIMITS OF EMBANKMENT
 ---C--- LIMITS OF EXCAVATION
 ---S--- REALIGN GUTTER
 PP -- POWER POLE
 TP -- TELEPHONE POLE

LEGEND
 --- METAL BEAM GUARD RAILING
 (1) CURVE NUMBER
 [] SURFACE AC PAVEMENT
 [] PLANE AC PAVEMENT

CURVE DATA

NO.	R	Δ	T	L	N	E
(1)	420.00	11°3'37"	40.66	81.00	203782.93	400454.36

ALL DIMENSIONS ARE IN FEET
 UNLESS OTHERWISE NOTED

Updated Storm Water Data Sheet



Dist-County-Route: 04-MRN/SON-1

Post Mile Limits: 81.0/81.3 and 0.0/0.1

Project Type: Bridge Replacement

Project ID (or EA): 20950K

Program Identification: SHOPP

Phase: X PID

☐ PA/ED☐ PS&E

Regional Water Quality Control Board(s): North Coast (Region 1)

Is the Project required to consider Treatment BMPs? Yes X No ☐If yes, can Treatment BMPs be incorporated into the project? Yes X No ☐If No, a Technical Data Report must be submitted to the RWQCB
at least 30 days prior to the projects RTL date.

List RTL Date: _____

Total Disturbed Soil Area: 2+ acres Risk Level: 3

Estimated: Construction Start Date: 03/01/2016 Construction Completion Date: 03/01/2018

Notification of Construction (NOC) Date to be submitted: 7 days prior to Construction

Erosivity Waiver Yes ☐ Date: _____ No XNotification of ADL reuse (if Yes, provide date) Yes ☐ Date: _____ TBD XSeparate Dewatering Permit (if yes, permit number) Yes ☐ Permit # _____ No X

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.


 Warwick Cheung, Registered Project Engineer/Landscape Architect


 Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

 Betsy Joseph, Project Manager

 Date

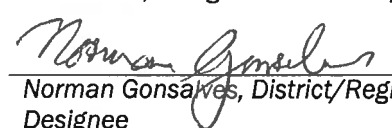
 Robert Braga, Designated Maintenance Representative

 Date

 David Yam, Designated Landscape Architect Representative

 Date

[Stamp Required for PS&E only]


 Norman Gonsalves, District/Regional Design SW Coordinator or Designee


 Date


Evaluation Documentation Form

DATE: 09/14/2011_____

Project ID (or EA): 20950K_____

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If Yes , go to 10. If No , continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document.	✓		If Yes , contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. <i>24</i> (Dist./Reg. SW Coordinator initials) If No , continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?	✓		If Yes , (Mrn/Son), go to 5. If No , document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If Yes , continue to 6. If No , go to 10.
6.	Is it a new facility or major reconstruction?		✓	If Yes , continue to 8. If No , go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?	✓		If Yes , continue to 8. If No , go to 10.
8.	Does the project result in a <u>net increase of one acre or more of new impervious surface</u> ?	✓		If Yes , continue to 9. If No , go to 10. <u>1 acre of reworked (Net Increase New Impervious Surface)</u>
9.	Project is required to consider approved Treatment BMPs.	✓		See Sections 2.4 and either Section 5.5 or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.
10.	Project is not required to consider Treatment BMPs. _____(Dist./Reg. Design SW Coord. Initials) _____(Project Engineer Initials) _____(Date)			Document for Project Files by completing this form, and attaching it to the SWDR.

1 See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs





PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT

Project Information

District 04	County MRN/SON	Route 1	PM MRN - 50.3/50.5 SON - 0.0/0.06	EA 20950K
Project Title: Estero Americano Bridge Replacement				
Project Manager Betsy Joseph			Phone # 510.286.5097	
Project Engineer Muktar Ketebe			Phone # 510.286.7231	
Environmental Office Chief/Manager Melanie Brent			Phone # 510.286.5231	
PEAR Preparer Phillip Badal			Phone # 510.622.1746	

Project Description

Purpose and Need

It was determined in 2000 STRAIN Report that the Estero Americano Bridge is structurally deficient. It is proposed to construct a new structure to ensure to current roadway geometric, hydraulic and bridge design standard.

Description of work

To update the PEAR prepared for Project Scope Summary Report (PSSR) approved in November, 2003. The scope of the PSSR to be refreshed to include the replacement of the Estero Americano Bridge and associated drainage work.

Alternatives

The build alternative brings the bridge to current standards, while the no build alternative leaves the existing facility unchanged.

Anticipated Environmental Approval

CEQA		NEPA	
Environmental Determination			
Statutory Exemption	<input type="checkbox"/>		
Categorical Exemption	<input type="checkbox"/>	Categorical Exclusion	<input checked="" type="checkbox"/>
Environmental Document			
Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND	<input checked="" type="checkbox"/>	Routine Environmental Assessment with proposed Finding of No Significant Impact	<input type="checkbox"/>
		Complex Environmental Assessment with proposed Finding of No Significant Impact	<input type="checkbox"/>
Environmental Impact Report	<input type="checkbox"/>	Environmental Impact Statement	<input type="checkbox"/>
CEQA Lead Agency (if determined): The California Department of Transportation (Caltrans) is the lead CEQA Agency for the project. FHWA assigned, and Caltrans has assumed, all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA.			
Estimated length of time (months) to obtain environmental approval:			24
Estimated person hours to complete identified tasks: Completing environmental document.			482

PEAR Technical Summaries

Water Quality and Storm Water Runoff:

This project must comply with the Department Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order No.: 99-06-DWQ) and the Construction General Permit (Order No.: 2009-0009-DWQ), both issued by the State Water Resources Control Board (SWRCB). Under the auspices of the SWRCB, the North Coast Regional Water Quality Control Board (Region 1) has authority to enforce NPDES and Construction General Permit requirements. To comply with these permits, the Department shall consider and incorporate temporary and permanent Best Management Practices (BMPs) using Best Available Technology (BAT) to the Maximum Extent Practicable (MEP), in order to minimize, or prevent, any potential increased impact to existing water quality. Per the Construction General Permit, development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) is required; this shall be prepared per Department Standard Special Provision (SSP) 07-345. The SWPPP is developed by the Contractor, and approved by the Department, prior to commencement of construction. In addition to the general permits mentioned above, it should be anticipated that a 401 Certification, issued by Region 1, will be required.

Cultural Resources:

The following work products will be required: a records search, ASR, XP1, HPSR and Native American consultation. The area is highly sensitive for prehistoric archaeological resources. Survey for architectural resources may be conducted after further field work and research is completed. XP1 will only be conducted if ASR has positive results for archaeological resources.

Hazardous Waste/Materials:

The project will need to be tested for hazardous waste. Environmental Engineering will conduct a site investigation during the design phase and provide appropriate hazardous waste specifications.

Biological Environment:

The following description is based on the Project Initiation Document (PID) dated March 2006 (metric standard). Caltrans proposes to replace the existing 7.5 m wide, 2-lane, 44.5 m long Estero American Bridge (Bridge #27-28) built in 1925, with a new bridge. The new bridge will be a 46.3 m long, 13.07 m wide, and 2-span cast-in place box girder. The new structure's deck will accommodate two 3.6 m lanes of traffic, two 2.4 m shoulders and Type 25 concrete barriers. Route 1 will be realigned and reconstructed for a length of 350 m within the existing Right of Way. Excavation and other work to remove silt, debris and vegetation from the Estero Americano Creek channel will be required. The Office of Biological Sciences and Permits will need to see an updated project description, to ensure that the proposed bridge design is still consistent with Caltrans' engineering and safety standards.

Based on initial scoping within existing commercial and regulatory agency databases (CNDDB, Rarefind, NAIP aerial imagery, GoogleEarth, NWIS, USFWS Critical Habitat Viewer, CalFish PAD mapper, CNPS Rare Plant Inventory) for biological resources within 5 miles of the project, and the USFWS species lists for the Valley Ford USGS 7.5' Quadrangle, it has been determined that this project has the potential to impact biological resources. The potential impacts are described below.

Flora/Fauna:

It is likely that state and/or federally threatened and endangered species will be present at the project site. There are state species of concern and plants on the California Native Plant Society's inventory of rare plants that have potential to be at the project site. Table 1 lists the state and federally listed species and habitats that have shown up in the database searches and species lists for the area. Other species (state species of concern and CNPS listed plants) that have recorded occurrences within 5 miles of the project site are included in a comprehensive species list attached to this memo (Table 5).

Table 1.

Species Name	Common Name	Status	Comments
Animals			
<i>Rana darytonii</i>	California red legged frog	FT, SSC	CNDDDB occurrences are recorded on either side of the bridge within 1 mile distance. Several ponds on either side of the bridge and creek exist within 1 mile distance, and contiguous habitat exists with Designated Critical Habitat.
<i>Speyeria zerene myrtilae</i>	Myrtle siver spot butterfly	FE	CNDDDB occurences nearby. Grazed pastures adjacent to project site may provide habitat.
<i>Eucyclogobius newberryi</i>	Tidewater goby	FE, SSC	CNDDDB occurrences are recorded downstream of the project site. Designated critical habitat occurs downstream of the project site.
<i>Syncaris pacifica</i>	California freshwater shrimp	FE, SE	Needs Habitat Assessment. No CNDDDB occurrences recorded in the Estero Americano, but there are occurrences in streams in adjacent watersheds to the north. The vegetation cover in the creek may provide habitat.
<i>Oncorhynchus mykiss</i>	Central California Coast Steelhead	FT, SSC	Designated Critical Habitat occurs downstream, but not at project location.
<i>Oncorhynchus kisutch</i>	Coho salmon, Central California Coast	FE, SE	Designated Critical Habitat does not appear to occur in Estero Americano Creek.
<i>Oncorhynchus tshawytscha</i>	California Coastal chinook salmon.	FT, SSC	Designated Critical Habitat does not appear to occur in Estero Americano Creek.
Plants			
<i>Lasthenia conjugens</i>	Contra Costa Goldfields	FE	CNDDDB occurrence recorded adjacent to SR1 in the project vicinity.
<i>Delphinium luteum</i>	Yellow larkspur	FE, SR	Designated Critical Habitat southwest of project site. CNDDDB occurrences recorded to the south.
<i>Trifolium amoenum</i>	Showy Indian clover	FE	CNDDDB occurrences recorded 1.75 miles northwest of the project site.
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	ST	CNDDDB occurrence recorded north of the project site. Habitat may exist in and around the project site.
Key:			
FE: federally endangered		ST: state threatened	
FT: federally threatened		SCE: state candidate endangered	
FSC: federal species of concern		SR: state rare	
SE: state endangered		CNPS: California Native Plant Society listed rare	

Waters/Wetlands:

Estero Americano Creek is a "blue-line" stream that drains directly into the Pacific Ocean, and is therefore a jurisdictional waters of the US. The NWIS database indicates that palustrine wetlands are adjacent to the project site. A jurisdictional determination and wetland delineation needs to be performed.

Biological Studies Needed:

Several biological studies will need to be performed during the PA&ED phase to support the permitting process. These studies are detailed in Table 2. DED is currently listed as September 2012 with PAED in September 2013. According to this schedule, studies need to begin promptly, with qualified consultants conducting their appropriate surveys in Spring 2012. In order to meet USFWS protocols, a second season of studies may be required, and would have to occur while the BA is under review.

Table 2

Studies Required	Comments
Fish Passage Assessment	A first pass fish passage assessment has been completed (PAD: 732678). Further study needed to inform project design and consultation with NMFS and CDFG.
Wetland delineation	Estero Americano Creek is a jurisdictional waters of the US. NWIS indicates that wetlands are present.
Rare Plant Surveys	Contra Costa Goldfields are recorded near the project.
Habitat assessment	CRLF, Myrtle Silverspot butterfly, Tidewater goby, California Freshwater Shrimp, Essential Fish Habitat
Bat Survey	Bridge structure and surrounding trees are potential roosts.
Tree Surveys	Oaks and riparian vegetation potentially affected by the project
NES	
BA (USFWS)	
BA (NMFS)	
Preconstruction nesting surveys	Nesting habitat present on and around the bridge.

Permits:

Table 3 lists the permits that will potentially be needed for the project. The list in Table 3 will be finalized pending the outcomes of field studies and receipt of a project description and project design.

Table 3.

Permits and Agreements Needed	Comments
USFWS Biological Opinion	Formal consultation will most likely be required for CRLF. Other species pending habitat surveys.
NMFS Biological Opinion	A Letter of Concurrence may be possible by using June 15 - October 15 work window.
RWQCB CWA 401 Water Quality Certification	
USACE CWA 404 Permit	
CDFG 1602 Lake and Streambed Alteration Agreement	

Avoidance, Minimization and Mitigation:

Specific avoidance and minimization measures will need to be worked out in consultation with CDFG, NMFS, USFWS, USACE, and RWQCB once the project footprint has been established and field studies completed. Work within CDFG, RWQCB, USACE and NMFS jurisdiction will be restricted to occur between June 15 and October 15 to avoid the rainy season and potential presence of migrating salmonids. The nesting season for birds is anticipated to run from February 15 to September 1. The exact dates will be refined through consultation with CDFG. Bird exclusion on the bridge and vegetation and

tree removal may need to occur outside of the non-nesting season. If vegetation removal occurs during the winter wet season, then all trees and shrubs should be cut above the ground and their stumps left in place to prevent soil disturbance, erosion, and discharge into the creek. Preconstruction surveys will be conducted for all listed plant and animal species and nesting birds. During construction, a resource agency approved biological monitor will be onsite during construction to monitor for the presence of species and to inspect avoidance and minimization measures. Delineation of ESAs on the plans and at the project site with ESA fencing will be required.

Project impacts may require onsite restoration and/or off site mitigation. Mitigation for permanent and temporary impacts to CRLF upland and aquatic habitat and Myrtle's Silverspot butterfly are likely to be required. Restoration of the stream channel, including shrubs and trees will be required. Restoration of the stream channel according to acceptable fish passage standards will be required.

Disclaimer

This Preliminary Environmental Analysis Report (PEAR) provides information to support programming of the proposed project. It is not an environmental determination or document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in the Project Scope Summary Report (PSSR). The estimates and conclusions in the PEAR are approximate and are based on cursory analyses of probable effects. A reevaluation of the PEAR will be needed for changes in project scope or alternatives, or in environmental laws, regulations, or guidelines.

Review and Approval

I confirm that environmental cost, scope, and schedule have been satisfactorily completed and that the PEAR meets all Caltrans requirements. Also, if the project is scoped as a routine EA, complex EA, or EIS, I verify that the HQ DEA Coordinator has concurred in the Class of Action.

Valerie Shearer
Environmental Branch Chief

Date: 9/19/2011

Betsy Joseph
Project Manager

Date: 9/20/2011

REQUIRED ATTACHMENTS:

PEAR Environmental Studies Checklist
PEAR Environmental Commitments Cost Estimate

Environmental Technical Reports or Studies Required (20950K)

	Study or Report	Document Text Only	Not Anticipated
Community Impact Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Visual Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floodplain Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Quality Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Paleontology	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cumulative Impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Growth Inducing/Indirect Impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural			
Archaeological Survey Report (ASR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic Resources Evaluation Report (HRER)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic Property Survey Report (HPSR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historical Resource Compliance Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHPO / PRC 5024.5	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Native American Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other XP1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Waste			
ISA (Additional)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PSI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Biological			
Endangered Species (Federal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Endangered Species (State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Species of Concern (CNPS, USFS, BLM, S, F)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological Opinion (USFWS, NMFS, State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish Passage Barriers Assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive Species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural Environment Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PEAR Mitigation and Compliance Cost Estimate*

District 04	County Solano	Route 84	PM MRN 1 – 50.3/50.5 SON 1 – 0.0/0.06	EA 20950K
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Description of Work: Estero Americano Bridge Replacement

Project Manager	Betsy Joseph	Date	
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Prepared by	Phillip Badal	Date	
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	Mitigation			Compliance
	Project Feature ¹	Enviro. Obligation ²	Statutory Require. ³	Permit & Agreement ⁴
Fish & Game 1602 Agreement				
Coastal Development Permit				
State Lands Agreement				
NPDES Permit				
COE 404 Permit- Nationwide				
COE 401 Permit				
COE Section 10 Permit				
COE Section 9 Permit				
Other: Biology				
Noise attenuation				
Special landscaping				
Archaeological				
Biological				
Wetland/riparian				
Historical				
Scenic resources				
Asbestos Testing/Mitigation				
Other:				
TOTAL (included in project cost estimate)	TBD	TBD	TBD	TBD

Costs are to include all costs to complete the commitment including: 1) capital outlay and staff support; 2) cost of right-of-way or easements; 3) long-term monitoring and reporting; and 4) any follow-up maintenance.

¹ Mitigation that Caltrans would normally do if not required by a permit or environmental agreement.

² Mitigation that Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

³ Mitigation that Caltrans would not normally do and is not required by a permit or Enviro. Agreement, but is required by a law.

⁴ Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.